

IN THE CLAIMS:

Please cancel claim 1.

Claim 1. (Cancelled).

Claim 2. (Original).

A process for producing a semiconductor wafer with a front surface and a back surface and an epitaxial layer of semiconducting material deposited on the front surface, wherein the process comprises the following process steps:

- (a) a stock removal polishing step as the only polishing step;
- (b) cleaning and drying of the semiconductor wafer;
- (c) pretreating of the front surface of the semiconductor wafer at a temperature of from 950 to 1250 degrees Celsius in an epitaxy reactor; and
- (d) depositing of the epitaxial layer on the front surface of the pretreated semiconductor wafer.

Claim 3. (Original).

The process as claimed in claim 2, comprising

polishing the front surface and the back surface of the semiconductor wafer simultaneously during the stock removal polishing.

Claim 4. (Original).

The process as claimed in claim 2, comprising polishing only the front surface of the semiconductor wafer during the stock removal polishing.

Claim 5. (Original).

The process as claimed in claim 2, comprising carrying out the pretreating referred to in step (c) immediately before the epitaxial depositing in the epitaxy reactor.

Claim 6. (Original).

The process as claimed in claim 2, comprising treating the semiconductor wafer, in a first step of the pretreating according to step (c), in a hydrogen atmosphere at a temperature of from 950 to 1250 degrees Celsius.

Claim 7. (Original).

The process as claimed in claim 2, comprising
treating the semiconductor wafer, in a second step of the
pretreating according to step (c), at a temperature of from 950
to 1250 degrees Celsius in a hydrogen atmosphere to which gaseous
HCl has been admixed; and removing from 0.01 to 0.2 μm of
material from the surface of the semiconductor wafer at an
etching rate of 0.01 $\mu\text{m}/\text{min}$ to 0.1 $\mu\text{m}/\text{min}$.

Claim 8. (Original).

The process as claimed in claim 2,
wherein the epitaxial layer deposited in step (d) has a
thickness of 0.3 μm to 10 μm and is deposited at a temperature of
from 600°C to 1250°C.

Claim 9. (Original).

The process as claimed in claim 2,
wherein the epitaxial layer deposited in step (d) is
rendered hydrophilic using an oxidizing gas.

Claim 10. (Original).

The process as claimed in claim 2,
wherein the epitaxial layer deposited in step (d) is
rendered hydrophilic by wet-chemical means.

Claim 11. (Original).

In a method for producing integrated semiconductor
components, the improvement which comprises
utilizing an epitaxially coated semiconductor wafer produced
by the process of claim 2 for producing said components.